**Kindergartener’s Plant Grass**

**Mid-Term by Kelli McCrink**



Kindergartener’s Plant Grass

Grade: Kindergarten

Subject: Science

Duration: 45 minutes

Grouping: Whole-class/Table groups

Objective:

* Students will have an understanding of the impact the pollution of water effects the environment.
* Students will observe the effects of watering grass plants with water compared to water with vegetable oil.

**Standard for the Professional Development of Teachers**:

Charlotte Danielson’s Framework for Teaching:

*Domain 3*- Instruction

*Competencies 3c*- Engaging Students in Learning

**New York City Scope and Sequence**:

Identify the basic needs of organisms to live and thrive:

* Needs of plants to live and thrive (e.g., air, water, light).
* Living things grow and change.

**New York State Common Core Curriculum Standards**:

**Writing Standards**

*Text Types and Purposes-*

*K.W.2*- Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

*Research to Build and Present Knowledge-*

*K.W.7*- Participate in shared research and writing projects.

**Speaking and Listening Standards**

*Comprehension and Collaboration*-

*K.SL.1c*- Seek to understand and communicate with individuals from different cultural backgrounds.

*K.SL.3*- Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

*Presentation of Knowledge and Ideas*-

*K.SL.6*- Speak audibly and express thoughts, feelings, and ideas clearly.

Materials:

1. Chart paper
2. Crayons, markers, pencils
3. Grass seeds
4. Plastic cups (2 different colors)
5. Post its
6. Science journals
7. Soil
8. Vegetable oil
9. Water
10. Yellow tape

Introduction:

* Students will think-pair-share what they predict will help grass plants grow. Teacher will chart student responses on chart paper.
* Teacher will create a t-chart where students will post-it if they think grass plants need water or water with vegetable oil to grow. Students will explain their predictions.
* Teacher will explain that plants need sun, air, and water to grow.

Procedure:

* Students will work with their table groups to plant their grass using soil, grass seeds, and plastic cups. Teacher will label one cup (water) and the other (water with vegetable oil).
* Students will water their grass plants accordingly, one with water and the other, water with vegetable oil.
* In their science journals, students will illustrate their observations every other day about the growth of the grass plants for the next week.

Assessment:

* Students’ science journal entries will be assessed using a rubric.
* Teacher will assess students based on classroom discussions.
* Teacher will assess students by using an exit ticket as the culminating activity, where students will illustrate what plants need to grow on an index card. Teacher will dictate their response on the index card.

Conclusion:

* At the end of the week, teacher and students will discuss their conclusions as to why one plant grew and the other did not. Teacher will pose questions such as: “**What were the results of watering plants with clean tap water as compared to water with vegetable oil?**” “**Why do plants need clean water?**”
* Teacher will relate this experiment with how pollution of the ocean effects the environment. Teacher will pose questions such as: “**What would happen to the plants and animals in the ocean if they became polluted with oil?**” “**What would happen to the beaches?**” “**What would happen if the water we drank became polluted with oil?**” Teacher will chart student responses.
* Students will share their science journals with partners.